

#2 / UOE  
11/20/01

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

APPLICANTS: Richard A. Lowden et al DOCKET : 0925  
SERIAL NO.: ART UNIT:  
FILED: EXAMINER:  
TITLE: Creep Resistant Refractory with Contolled Optical Emission



**INFORMATION DISCLOSURE STATEMENT under 37 CFR 1.56 and 1.97**

The Commissioner of Patents and Trademarks  
Washington, D. C. 20231

Sir:

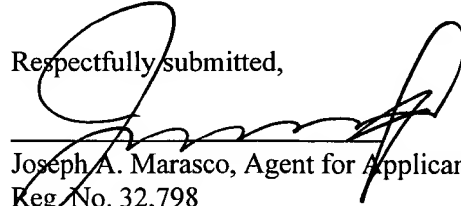
Submitted herewith on Form PTO-1449 is a listing of documents known to applicant in order to comply with applicant's duty of disclosure pursuant to 37 C.F.R. § 1.56. A copy of each document is being submitted herewith to comply with the provisions of 37 C.F.R. §§ 1.97 and 1.98.

Applicant presents these references that the Patent Office may determine any relevancy thereof to the presently claimed invention.

Applicant respectfully requests that the references be expressly considered during the prosecution of the subject application and made of record therein and appear among the "references cited" on any patent to issue therefrom.

Applicant also requests that an initialed copy of Form PTO-1449 be returned in accordance with MPEP Section 609.

Respectfully submitted,

  
Joseph A. Marasco, Agent for Applicants  
Reg. No. 32,798  
UT-Battelle, LLC  
P.O. Box 2008 MS 6498  
Oak Ridge, TN 37831  
(865) 574-4178

**Certificate of Mailing**

I hereby certify that this correspondence is being deposited with the U.S. Postal Service as EXPRESS MAIL in an envelope addressed to Assistant Commissioner for Patents, Washington, D.C. 20231 on

August 23, 2001.

Helen Atchley

Express Mail No. EF070545319US

+

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

JC979 U.S. PRO  
 09/935852  
 08/23/01

[illegible]

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:** Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box → +

PTO/SB/08B (10-96)  
Approved for use through 10/31/99. OMB 0651-0031  
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO  <h2 style="text-align: center; margin: 0;">INFORMATION DISCLOSURE STATEMENT BY APPLICANT</h2> <p style="text-align: center; margin: 5px 0;">(use as many sheets as necessary)</p>		<h3 style="text-align: center; margin: 0;">Complete if Known</h3> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Application Number</td> <td style="width: 50%;"></td> </tr> <tr> <td>Filing Date</td> <td></td> </tr> <tr> <td>First Named Inventor</td> <td>Richard A. Lowden</td> </tr> <tr> <td>Group Art Unit</td> <td></td> </tr> <tr> <td>Examiner Name</td> <td></td> </tr> <tr> <td>Attorney Docket Number</td> <td>0925</td> </tr> </table>		Application Number		Filing Date		First Named Inventor	Richard A. Lowden	Group Art Unit		Examiner Name		Attorney Docket Number	0925
Application Number															
Filing Date															
First Named Inventor	Richard A. Lowden														
Group Art Unit															
Examiner Name															
Attorney Docket Number	0925														
Sheet	2	of	2												

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	12	ANDREW A. WERESZCZAK ET AL, "Asymmetric Tensile and Compressive Creep Deformation of Hot-Isostatically-Pressed Y2O3-Doped -Si3N4," J. Eur. Cer. Soc., 1008 Elsevier Science Limited (Great Britain), p. 227-237, (1999).	
	13	DONALD L. CHUBB ET AL, "Rare-Earth Optical Temperature Sensors," John H. Glenn Research Center at <a href="http://nasatech.com/Briefs/June01/LEW17138.html">http://nasatech.com/Briefs/June01/LEW17138.html</a> (Cleveland, Ohio),	/
	14	R. J. LAUF ET AL, "Evaluation of Ceramic Insulators for Lithium Electrochemical Reduction Cells," J. of Electrochemical Soc., Vol. 139 ( No. 8), p. 2089-2091, (August 1992)	
	15	TRIPLICANE A. PARTHASARATHY ET AL, "Deformation Behavior of an Al2O3-Y3Al5O12 Eutectic Composite in Comparison with Sapphire and YAG," J. Am. Ceram. Soc., Vol. 76 ( No. 1), p. 29-32, (1993).	/
	16	TRIPLICANE A. PARTHASARATHY ET AL, "Creep Mechanism of Polycrystalline Yttrium Aluminum Garnet," J. Am. Ceram. Soc., Vol. 75 ( No. 7), p. 1756-59, (1992).	/
	17	S. J. SCHNEIDER ET AL, "Solid State Reactions involving oxides of Trivalent Cations," Journal of Research of the Nat'l Bureau of Standards--A. Physics & Chemistry, Vol. 65A ( No. 4), p. 345-, ( July-August 1961).	/

Examiner Signature	Date Considered
--------------------	-----------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.